

Title (en)

MRI SYSTEM HAVING A GRADIENT MAGNET SYSTEM WITH A GYROSCOPE

Title (de)

MRI-SYSTEM MIT EINEM GRADIENTENMAGNETSYSTEM MIT EINEM GYROSKOP

Title (fr)

SYSTEME D'IMAGERIE PAR RESONANCE MAGNETIQUE AVEC UN SYSTEME A GRADIENTS MAGNETIQUES POURVU D'UN GYROSCOPE

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Abstract (en)

[origin: WO2004081596A1] The invention relates to an MRI system (1) comprising an examination volume (11), a main magnet system (13) for generating a main magnetic field (B0) in the examination volume, a gradient magnet system (19) for generating gradients of the main magnetic field, and an anti-vibration system (39) for reducing vibrations of the gradient magnet system. According to the invention the anti-vibration system comprises a gyroscope (41) which is mounted to the gradient magnet system. As a result of the gyroscopic effect of the gyroscope, the vibrations of the gradient magnet system are effectively reduced. In an open type MRI system (1) according to the invention, a separate gyroscope (41, 43) is mounted to each of the two portions (21, 23) of the gradient magnet system (19), and each gyroscope has an axis of rotation (61) parallel to the main direction (Z) of the main magnetic field (B0).

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